

THE BULLETIN

A NEWSPAPER BY AND FOR Y-12 EMPLOYEES OF UNION CARBIDE NUCLEAR COMPANY DIVISION OF UNION CARBIDE CORPORATION

OAK RIDGE, TENNESSEE

Wednesday, July 17, 1963

News Briefs

The final in a series of ship-ments of enriched uranium was made recently for the fabrication of fuel for the Dresden Nuclear of fuel for the Dresden Nuclear Power Station by the Oak Ridge Gaseous Diffusion Plant. A total of about 25,740 pounds of uran-ium is being furnished, which will ultimately be used in the Dresden Nuclear Power Station, the world's first large-scale power reactor of the boiling water type.

Union Carbide Chemicals Company's tanker, The Carbide Texas City, recently rescued four occupants of a sinking sailboat about 60 miles east of Cape Canaveral. The sailors had started for the Grand Bahama Island, which is about 75 miles from Fort Lauder-dale, but had drifted off course. The marooned seamen had more thanks to give Carbide also . . . their batteries they signalled their SOS with were, of course, Eve-

Union Carbide has signed an agreement with Varta Aktienge-sellschaft of Frankfurt, Germany, which will provide for the ex-change of information on the research and development of fuel cells. Both firms have made sub-stantial contributions to the de-velopment of current fuel cell technology.

Oak Ridge National Laboratory made a total of 961 shipments of radioisotopes during June, representing a total of 61,013 curies of activity. Thus far in 1963, ORNL has made a total of 6,539 shipments totaling 151,784 curies.

Union Carbide recently announced that it expects to start producing carbon steel welding wire at a new plant at Ashtabula, Ohio, which was scheduled to be ready for production this month. The new welding wire facilities will be operated by Linde Company, a division of Union Carbide.

Estimated 1962 chemical industry expenditures totaled \$934 million, or a gain of 166 per cent over the similar investment of \$350 million for 1953. During the 10-year period production increased by 106 per cent, while wholesale prices went up only three per cent.

ORNL's Moon To Lead **Physics Seminar Friday**

R. M. Moon, Oak Ridge National Laboratory Physics Division, will lead the seminar Friday, on "Coherent Scattering of Polarized Neutrons from Hexagonal Cobalt."

The seminar is scheduled for

The seminar is scheduled for Friday, July 19, at 3:15 p.m. in the East Auditorium of ORNL's

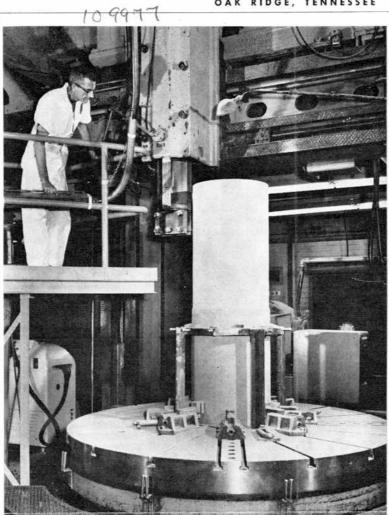
SAFETY SCOREBOARD

The Y-12 Plant Has Operated 75 Days Or 2,494,000 Man-Hours

(Unofficial Estimate) Without A Disabling Injury

Through July 14 Phone 7755 For Daily Report

On Accident-Free Hours



BURNETH R. CABAGE, General Machine Shop, is seen machining an aluminum oxide insulator to be used in the Princeton Stellarator C.

Y-12 Fabricates Large Ceramic **Tubes For Princeton Stellarator**

withstand high temperatures, are being fabricated in Y-12 for a controlled nuclear fusion device at the Princeton University Plas-ma Physics Laboratory at Prince-ton, New Jersey.

The work is being performed

for Frenchtown Porcelain Company at Frenchtown, New Jersey, prime contractor for the fabrication of the tubes. The fabrication is being conducted as part of the Atomic Energy Commission's co-operative effort with private industry. The unique capacity required for this pressing operation is not available through normal industrial channels.

The tubes will be used in the S stellarator, an experimental device in which Princeton scientists attempt to contain a heavy form of hydrogen (deuterium) at temperatures exceeding those at the core of the sun. The Princeton

Large ceramic tubes, able to Laboratory is one of several thermonuclear installations sponeing fabricated in Y-12 for a sored by the AEC in an effort to achieve power from the fusion of light atoms.

Eight tubes composed of alumi-num oxide are being fabricated at lengths ranging from 62 to 78 inches. The overall diameter is 23 inches.

The alumina powder is received in Y-12 from Frenchtown Porcelain Company, placed in special molds, and pressed isostatically (equal pressure from every side) at 30,000 pounds per square inch. The compacted cylinders then are

heated in an oven to approximately 2012° Fahrenheit.

After this "low-firing" operation, the tubes are machined to approximate dimensions and sent to the Frenchtown Porcelain Company for heating to higher temperatures and for grinding to temperatures and for grinding to specifications set by Princeton.

Picnic July 25

lun . . . that's the word from B mission recently commented on Shift folks . . . as they plan a family-style get - together next Thursday, July 25. The festivities achieved by employees of the get underway around 10 a.m. at Concord Park.

The only thing you have to bring is your lunch . . . and your-self. Everything else is free . . . including swimming.

There are also prizes and games for the entire family. If Thurs-

AEC Chairman Comments On Installations' Safety

Dr. Glenn T. Seaborg, Chair-Y'uns come and bring the chil- man of the Atomic Energy Comthe safety record of AEC installations. "The safety records AEC and its contractors are achievements justifying great pride and satisfaction. The atomic energy industry from the begin-ning made safety a prime con-sideration. The firm and established place which safety has alday next is an SDO, come on out, Y-12er, B Shifters will be glad to see you! ways held in all nuclear activities is primarily responsible for our habit of winning awards."

Additional Executive Changes Announced By Union Carbide

Additional executive changes have been announced in Union Carbide Corporation by Birny Mason Jr., president, as two vicepresidents are named and a director of the Law Department is appointed. Hermann K. Intemann and Farnsworth L. Jennings have been elected vice-presidents, and Frank R. Lyon Jr., has been named director of the Law Department.

Herman K. Intemann joined Union Carbide in 1930 as a laboratory technician for the Halowax Corporation, Bloom field, New Jersey. He has been associated with Union Carbide Plastics Company where he became vice-president and general salesmanager in 1953 and Union Carbide Metals Company of which bide Metals Company of which he was appointed president in 1957. A director of purchases of Union Carbide Corporation since 1960, Intemann is a graduate of Stevens Institute of Technology where he received the degree of ME in 1930. He received an honorary LLD degree from West Virginia Institute of Technology in 1960. He will be responsible for traffic and purchasing activities as vice-president of Union Car-

Farnsworth L. Jennings has been in Union Carbide's law department since 1935. He was made director of the department in 1955. An alumnus of the University of Idaho where he received the degree of bachelor of arts in 1928, Jennings was a Rhodes Scholar at Oxford University in England and received the degrees of bachelor of arts in 1931 and bachelor of civil law in 1932. In 1933, he was awarded the degree of doctor of jurisprudence from Yale University where he was a Sterling Fellow. Jennings will be responsible for law and patent

Succeeding Jennings as director of the Law Department, Frank R. Lyon Jr. joined the corporate law staff in 1951 after more than 10 years in private practice. He is a graduate of Colgate University where he received the degree of BA in 1933. He was also awarded an LLB from Harvard Law School in 1936.

Watching Eclipse? Then WATCH It!

If you plan to watch the eclipse of the sun Saturday, you'd better watch it, according to the National Society for the Prevention of Blindness, Inc. Between 3 and 5 Saturday, July 20, the entire North American continent will be North American continent will be affected by the eclipse, ranging from complete darkness in parts of Alaska, Canada, and the State of Maine, to partial darkness on other spots of the continent.

A serious threat to the eyesight, a straight-on look at Ole Sol can permanently damage the eye's retina. There is no safe way to look directly at the eclipse, warns

look directly at the eclipse, warns the Society. Dark glasses, exposed photographic film, or smoked glass do not afford proper protection from the dangerous infrared rays that can cause incurable retinal burns. The retina is insensitive to pain; therefore, the victim doesn't realize the damages until it's too late.

A simple projector may be constructed from cardboard, or an old discarded box.

Under no circumstances should anyone peer at the sun through binoculars. Pin holes do not offer ample protection either. Remember, if you watch the eclipse. ber, if you watch the eclipse, watch it. You may ruin your eyes.



Herman K. Intemann



Farnsworth L. Jennings



Frank R. Lyon Jr.

WITCH DOCTOR CURE

Doctors now believe the old wives' tale of rubbing a gold wedding ring on sties may have some scientific value. The salty tear has enough chlorine to dissolve gold in minute amounts, forming gold chloride, which is used in many modern eye medication.

Bulletin

Published Weekly For The Y-12 Employees Of UNION CARBIDE NUCLEAR COMPANY Division of



Union Carbide Corporation JAMES A. YOUNG Editor



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A half dozen Y-12ers move into realm of 20-year veterans within the next few days. Congratulations to them, and other Y-12ers celebrating anniversaries.

20 YEARS

Arnold H. Norman, Steam Plant, July 17. Gentry L. Underwood, Project

Engineering, July 19.

Newton A. Stone,
Services, July 19.

Research

Martha L. Beals, Product Pro-

cessing, July 19.
Elizabeth S. Harris, Beta Two,

James P. Seagle, Beta Two, July 23.

15 YEARS Harold R. Bailey, Electrical, July 20.

10 YEARS

William A. Kramer, Graphite Shop, July 17.

John L. Isabell, Chemical Department, July 17.

Millard M. Maples, General Ex-

pediting and Auxiliary Services, July 20. Alvin L. Melton, Beta Two,

July 20. Joseph E. Hannah, Product Pro-

cessing, July 20. Fred Farmer, Chemical Depart ment, July 20

John Q. Hopwood, Chemical Department, July 20. Joseph C. Bailey, Product Pro-

cessing, July 20.

David R. Masters, Chemical En-

gineering Development, July 20.

Daniel W. Coffey, Product Processing, July 20.

Charles W. Perry, Beta Two.

James H. Qualls, Chemical Department, July 20.

John B. Wright, Product Pro-

cessing, July 20.

Edmund R. Outler, Product
Processing, July 20.

Kestel England, Electrical, July

Joseph E. Shoffner, Area Five

Maintenance, July 20.

Jesse B. Brabson, Special Mechanical Production, July 20.

William Hardy, Building Grounds and Maintenance Shops,



"Sometimes I think he's years ahead of his time.'



A light bulb is the only thing that can go out every night . . and still be bright the next day.

Going out into the plant, it's is anxiously awaiting the flapping

FINANCE AND MATERIALS Plant Records has Effic Lou Cagley vacating in Arlington,

From the Cashier and Travel Office Wanda Hawn is vacation-

ing in and around home. Reproduction has Charlie Hughes also at home.

Microreproduction and Engineering Services puts Bob Mann and his family on vacation in Florida.

One good thing about drive-in movies. When they're over, you always know where your wife's shoes are.

MECHANICAL OPERATIONS

Production Control comes in with a bundle of news . . . first the John Hardings spent their vacation at Daytona Beach . . . Doris Sartelle, hubby, and three charming daughters spent theirs camping out at Cosby and fighting away the bears . Ed Cothron and Mike Mount followed the course of the Tennessee River from Kingston, down through Alabama and back up to Paducah by boat. They covered 568 water miles in four days. Ed's wife Jeanne met them in Paducah (via

Doug Carter spent his vacation in Virginia visiting his mother other relatives . . . Frank Carringer spent his vacation at home in Knox . . . Loyd Sheffield and family went to the nation's Capitol and toured historic Williamsburg, which he reported to enjoy tremendously . . . Tommy enjoy tremendously . . . Tommy Todd vacationed in his home town Joe Sherrod went to the Jaycee Convention.

Fred Baker took off for Richmond, Virginia . . . Bob Cable stayed at home in Knoxville. Greeta Luallen and family spent their vacation in Indiana.

A belated welcome to Doug Carter, who transferred from ORGDP June 1 . . . also a big welcome to Alice Edgeman.

Congratulations to the Merle Emerys who have a new baby daughter, Lisa Marie, who was born June 23, weighing six pounds, six and one-half ounces.

At summer camp for two weeks

is Jimmy Davis.
Get well wishes to Harold Babb who has been hospitalized recently . . . at home now for a recu-

peration period. Sincere sympathy is extended to Elinor Charpie whose son-inlaw passed away recently.

From former employees . . . it's learned that the **Jim Crones** are the proud parents of a baby boy born in New Orleans . . . no details . . . The Bob Harrises visited his parents at Farragut over the Fourth week-end and are doing real well. They also spent some time with Liz and Fuzz on Norris Lake.

General Machine Shop passes news that J. S. McCarty, wife and son Joe, report an enjoyable vacation in Texas recent-. . . visiting the Alamo and other points of interest.

to tour the state of Florida; also of an inch larger, that is!) E. R. Stover who is off to Clear-Chuck Bolyard started

water.

G. W. Callahan is going to his ol' home state of Virginny and on to Washington, D. C. . . . R. P. Russell and Mavis went to Beaumont, Texas, to visit a sister who is ill... Homer Park is back from a week's vacation with a nice smooth rain tan (AND a new ree... Floyd Ludwig is visiting

of little wings around his house . . . Old Storky is due most any

Jack Steward vacationed at home in Oliver Springs, also entertained relatives . . . John Neeley is going to try another John camping trip on Norris Lake; his

last one saw the rains come! From Alpha Five Dana Arnold is on his annual safari with the Army for two weeks . . . A. O. Roberts and his family spent a week in Clearwater, Florida, see-ing the sights and just having a good time . . . C. R. Bates spent a week in his old home in Jack-son, in West Tennessee . . . Anybody interested in some good lots, just see W. H. Foust, at Claxton.

The Beta Four Heavy Machine Shop tells that Jesse Johnston had one day's vacation recently and enjoyed it so much he just took a whole week off . . . Richard Dew came back from a vacation recently with painter's colic.

A. E. Burger went to Daytona for a week . . . got sunburned under the night lights at the dog races . . F. A. Watson was there at the same time, but he spent his time deep sea fishing. He caught several big ones. He and Burger and their families had a fish fry while down there.

Jim Nevils and family went to Daytona also . . . and to St. Petersburg on their vacation . . . Jim really enjoyed the car race (the 400) while there.

C. F. Butler and his family are spending a week in Daytona. Even the boss got down there too . . . as C. E. Hensley and the mizzes appeared on the scene. From the cards received, it's expected that Claude will have a bright neon tan, too.

If you see a little old lady sell-

ing garden produce from Market Square, it isn't Mrs. K., it's Betty Ward. She is moving to the farm she and her husband have purchased on Gallaher Road.

Other vacationers from the Shop are L. R. Benker, M. R. El-road, L. Johnson, R. F. Phillips, R. B. Russell, R. M. Westcott and H. Whaley . . . T. H. Fox is sol-diering for two weeks . . . Also vacationing are B. R. Berrier and H. E. Hammack.

Production Machining, M-Wing has J. W. Pryor and family vacationing in Daytona Beach . . R. C. Johnston Jr. is going to do some work on his farm down in Polk County . . . G. B. Borella states that he is taking his vaca-

tion in South Alabama. Sympathy is extended to the family of **L. Smith,** C-Wing, on the recent death of his father.

C. E. Sayne reports the Florida highway patrolmen are nice, but rather expensive down on Interstate Highway number 10, so a word of caution to those heading that way on vacation.

The General Machine Shop, Alpha-One, long absent from these columns, presents a roll of news this week

Recently spending a week on Watts Bar Lake was Lyle Lankford with his family . . . son Gerald and his family also vacationed Special Mechanical Production, F-Area, tells that Jack Lovegrove ald's wife Pat caught a larger fish is off to Watauga Lake for a week of fishing . . . A. W. Borum plans well with Mr. Lyle! (one-eighth

Chuck Bolyard started a twoweek vacation recently, going to Huntsville, Alabama . . . then on to Mannheim, West Virginia to visit relatives . . . with a side trip into Ohio and on to points

his old stomping grounds around H-2 Area has Carl Dorr visiting last week a few folk around his old stomping grounds around bis least week a few folk around his old stomping grounds around bis least week a few folk around his tives... Janice Gore vacationed trecently in parts unknown... Ralph Lawson also finished a



SURE TO APPEAR AT MOST Y-12 golf tournaments is the above foursome, seen in recent action . . . Walt Simmons putting, and watching from left are C. A. Peters, J. Clyde Bowles, and Hugh Caudill.

Saturday Golf Tournament Will Take Place At Beaver Brook

scene has been shifted from Niota to Beaver Brook. Management at Niota advised last week that some of the greens had been lost because of the severe winter.

Tee-off times were assigned for Saturday, July 20's play last Tuesday in the Recreation Office as was previously scheduled.

Golfers leaving from Oak Ridge should proceed on 25W to Emory Road in the Powell Community.

Saturday's golf tournament | Proceed out Emory Road to Dry ene has been shifted from Niota | Gap Pike beyond Powell High School. Turn again at Cunning-ham Road and proceed to course.

Knox golfers may take Central Avenue Pike out to Dry Gap Pike, then turn on Cunningham Road.

Golfers are asked to appear at least 20 minutes before set teeoff times. Frequently the schedule can be moved up and four-somes can go off slightly before scheduled times.

couple of weeks vacation . . . Jack Conn just returned from a week in Michigan. His vacation was interrupted by his daughter's ill-

Harry Hays recently vacationed in Michigan visiting relatives . Earl Johnson left recently for a glorious three-weeks in Florida. Welcome in to newcomer J. R.

Morton. A postcard tells that Charlie McCarley went to St. Augustine,

Florida for his vacation. Convalescing at home in Oak Ridge from an injury on skis on the lake the Fourth is **Lewis Wat-**

Sympathy is extended to W. E. Chadwick whose father died re-. also to J. D. Clark whose sister passed away.

Vacationing last week were L. C. Bell, T. E. Buckner, E. C. Edwards, W. E. Chadwick, H. M. Monday, O. C. Duck, B. R. Cabage, J. M. Butts, J. L. Crossno Sr., J. L. Billings, H. S. Weaver, C. C. Edwards, W. W. Watt, C. H. Drummond, G. W. Byrge, G. W. Carter, A. J. Crawford, Fred Williams, D. R. Mur-

phy, H. T. Pless, C. A. Hooper, W. H. Rodgers, L. Gibson, W. L. Lowry, C. C. Beeler, J. W. Young, L. M. Bray, J. K. Stewart, S. J. Vaden, E. G. Vann, L. Baker, E. E. Burns, C. E. Nichols, H. V. Evans, K. A. Tidwell, J. S. Johnson, K. E. McCulley, D. H. Allen, F. L. Teno, L. N. Moncier, M. G. McGill, K. G. Kincaid, H. H. Ken-kins, H. F. Smith, H. B. Lefler, J. W. Powers, J. D. Morris, J. T. Creasman, J. D. Clark, G. S. Weaver, H. V. Mynatt, J. D. Byrd, Weaver, H. V. Mynau, J. B. Byrd, J. H. Whatley, D. L. Bowers, H. P. Alexander, J. L. Cadle, A. T. Gladson, J. W. Beeman, L. E. Underwood, Wayne Oaks, T. Scott, H. C. Huston, and R. V. Hawk. (Now, say you never got your name in the Bulletin!)

Experience may be a good teacher . . . but nobody ever leaves an apple on her desk!

SPECIAL PROJECTS

The State of Massachusetts is being honored with the presence of George McGown and family for two weeks. He plans to rent Continued on Page 4 6-1157



WHO BELONGS TO THIS? . asks the Phantom. It seems this little VW got the treatment recently at Central Portal after its owner came to work early. Fellow employees, anticipating future developments, gave the VW driver a send-off on his vacation honeymoon. (Actually, the little car belongs to Herbert Mitchell, Electrical Engineering, who was married June 30. His co-workers decided the parking lot was not "off-limits" for a good, healthy practical joke.)

Slo Pitch League Locks In Three-Way Tie With Mets, E Wingers And Rebs

Play-Off Will Decide First Half Winners This Week; Second Half Gets Off To Roaring Start

Five games recently wound up the first half of the Slo Pitch League . . . with a big three-way tie resulting for first place. Two games were cancelled, since they did not affect standings, as the Data Processing team cancelled their tilts with the Cherokees and

Shop team 16 to 7 . . . as Teno and Wright homered. Miller tripled and Wright doubled . . . all for the losers. The E Wingers in their 16 hits had doubles by Cavosie, Harding and Austin.

Team E Wingers E Wingers 16 16 5 Big Shop 7 14 5 Batteries: E Wingers: Haygood and Hyatt. Big Shop: Law and Moncier. The final game Friday, July 5 was a close one . . . as the Mets,

was a close one . . . as the Mets, from ORGDP, barely edged by the Peons . . . 17 to 14. Keith, Whittlesey and Dripps homered for the winners . . Grubb and Rutherford for the losers while Johnson connected for two.

Team R H E Mets 17 26 2 Peons 14 18 5 Batteries: Mets: Iacovino and Witt. Peons: Thompson and Rutherford.

The Rebs took another forfeit Monday, July 8 from the Bunt Boys.

Rebs Fall Quickly
Last Wednesday's big game developed the three-way tie for first place as the E Wingers handed the Rebs their second falling of the season, 8 to 5 in a tight one.
The winning Wingers had 14 bits doubles by Forrester Cavo-

hits, doubles by Forrester, Cavosie and Harding. The Rebs had two doubles of their nine hits... by Babb and Lawhorn.

Yeam R H E
Wingers 8 14 2
ebs 5 9 0
Batteries: E Wingers: Sise and Hyatt.
ebs: Lawhorn, Lewis, Brady and suckley. Team E Wingers Rebs

Rebs: Lawhorn, Lewis, Brad, Buckley.

Thus, the E Wingers, Rebs and won nine . . . lost two record. A play-off, set for sometime this week, will decide the first half 1 at Half Standings

1st Half Standings	
Team W	L
Rebs9	2
E Wingers 9	3 2
Mets (ORGDP)9	3.2
Peons 7	4
Eagles 7	4
Tabs 6	5
Big Shop 5	6
Cherokees 4	6
Data Processing 4	5
Slip Sticks3	8
B Shift 2	9
Bunt Boys1	9
Meanwhile before the	cham-

pionship for the league's first half got settled, the second half went into roaring play.

Monday's action began as the

Cherokees took a forfeit win from the B Shift team.

Tabs Win Big

The first actual game played saw the Tabs defeat the Bunt Boys 28 to 3. Coulter, Knight, and Groppe had triples for the winners . . . while Ryder, Wyatt and J. Jones had big doubles. Underdown doubled for the losing Boys. Team R H E

New hunting regulations for Team R H E
Tabs 28 28 28 0
Bunt Boys 3 6 4
Batteries: Tabs: Ryder and R. Jones.
Bunt Boys: Miller and Perry.
Another close battle closed out

Monday's action as the Eagles scalped the Peons, 16 to 14. For the winners it was Dykes with three homers . . . Pryor with one

John Pridgeon with a big double. On the losing squad Roe had three homers also and Shotts Acts by counties. The season is poled one.

Team Eagles Peons 21 11 Batteries: Eagles: Bell, Halsey and Chompson. Peons: Thompson and Thompson. Peons: Thompson and Wright.
Tuesday's games began with

the Rebs sticking the Slipsticks 12 to 2. Riggs homered for the winners, Mahaffey tripled and Lewis doubled.

Rebs Slipsticks 2 5 3
Batteries: Rebs: Lewis and Fraola.
Slipsticks: Febbo and Fogg.
The E Wingers won easily over isn't worth two cents.

Team R H E
E Wingers 9 9 9 3
Big Shop 1 10 4
Batteries: E Wingers: B. Sise, Hagood and Austin. Big Shop: Law and Rhea.
Two ORGDP teams collided
Two defeated Data

early, as the Mets defeated Data Processing, 12 to 9. Crass had a big triple for the losers. Keith and Cox had doubles for the winning

Team R H E
Mets 12 13 0
Data Processing 9 8 5
Batteries: Mets: Iacovina and Keith.
Data Processing: Fourman and Clan-

Thursday night saw the second half get down to real serious business . . . first off, the Tabs defeated the Bat Boys (new in the second half) by a one-sided score of 26 to 0. Homers were clouted by Wyatt, Coulter, Holland and R. Jones. Coulter also had two

triples.

Team R H E C Tabs 26 22 1

Bat Boys 0 2 9

Batteries: Tabs: Moon and R. Jones.
Bat Boys: Brown, Bryant and Morgan.

The ORGDP Mets downed the Cherokees 12 to 2 in the second game. Henderson and Whittlesey had homers . . . while Cates had a triple and Keith had two on the winning side.

Team Mets Cherokees Batteries: Mets: Whittlesey and Ceith. Cherokees: Watkins and Laurendine.

The final game of the week pitted two Y-12 teams against each other as the Eagles soared over the Big Shops 25 to 10. Richards and Dykes had long homers for the winners . . . Peters for the losers for the losers.

Eagles	.25	25	5
Big Shops		13	9
Batteries: Eagles: Bell			ev.
Big Shops: Law and Rhea		400 N.	-*::
Second Half Standing			
The state of the s	155.		
Team	W		L
Eagles	2		0
Tabs	2		0
Mets (ORGDP)	2		0
Rebs	1		0
E Wingers	1		0
Cherokees	1		1
B Shift	0		1
Bunt Boys	0		î
Peons	0		î
Data Processing (ORGDP)			î
	0		1
Slip Sticks	0		1
Bat Boys	0		1
Big Shops	0		2

Rabbit Season Will Open First

New hunting regulations for the 1963-64 season in Tennessee have just been released. The first open season marks the squirrel as August 31 opens the bushy-tailed season and January 1 closes it out. Rabbit season is defined as from November 18 through January 25.

Open season remains on the skunk, weasel, bobcat, groundhog, and gray fox unless by Private open year round also on the following birds: great horned owl. English sparrow, crow, Cooper's hawk, starling, bluejay, sharpshinned hawk and the lowly buzzard.

These seasons do not apply on Wildlife Management Areas or in the Great Smoky Mountains National Park. Hunters can take no game there at all, unless on organized, authorized hunts.

Without your support, security



Y-12'S ROARING REBS had the first half of the Slo Pitch league pretty well sewn up until last week when they dropped their second game to the E Wingers. Thus, the Wingers, Rebs and the ORGDP Mets share a won nine—lost two record. A play-off this week will decide the first half champs. Kneeling in the front row, from left, are Tom Hardin, Manager Jan Buckley, Phil Parrett and Jim Bryson. Standing are Dan Greaser, Don Mehaffey, Dale Lewis, Assistant Manager Ray Riggs, Bill Butterini, and Jim Fraola. Not pictured are Jerry Babb, Jim Lawhorn, Harry Conner, Conrad Strike, Howard Price, and Kendall Brady.

Take Par Tee Tilt

THE Y-12 BULLETIN

Win First Half Crown In Play-Off

That neck-and-neck battle in the Y-12 Par Tee miniature golf the Y-12 Par Tee miniature golf league went right down to the wire. A play-off determined the first half winners as George Cantrell and J. D. Brown officially copped the crown. They took Ernie Stinnett and W. C. Collins by only three strokes! . . . 99 against 102. (Frank Kennedy substituted for Stinnett).

In the play-off tilt Brown aced two holes, four and five . . . while

Kennedy took hole number four. The half-league champs Brown-Cantrell defeated their last regular opponents Parker-Cothron roundly by a good 31 strokes, winning three points. Lucy Parker aced holes four and 12 . . . Jeanne Cothern took four and 18 7th, 8th Rounds

. . . Cantrell took five . . . while Brown had bull's-eyes on four, five and 10.

The runners-up Stinnett-Collins defeated B. Cantrell-Young by nine strokes. Collins and Kennedy had ones on hole number four.

Other matches saw Sinclair-Akers take Stansell-Newby (Bob Bass subbing for Virginia Newby) by only one stroke. Sinclair, Stancell and Bass scored deadeyes on hole four . . . while Akers took hole seven and 16.

Jim Beckett and W. A. Ruther-ford defeated Virginia Boswell and Jo Ann Isham by 21 strokes. All four golfers aced hole four Beckett tallied also on nine and 18.

Loogue standings (often pless

League standings	(arter	pray-
off)		
Team	w	L
G. Cantrell-Brown	1812	51/2
Collins-Stinnett	1712	612
Beckett-Rutherford	1512	512
Akers-Sinclair	13	8
R. Cantrell-Young	111/2	91/2
Newby-Stansell	4	17
Boswell-Isham	312	1712
Parker-Cothron	31/2	1712

Savings Plans Pay More Than \$300 Million

Savings plans have been avail-able to Union Carbide employees since 1935. Since 1953, when the present plan went into effect, more than \$300 million in cash has been distributed to partici-pants in the plan.

G. Cantrell-Brown Fred Lynch Is Top Archer For The Golds

Y-12er Fred Lynch, firing on the Gold team, took individual handicap honors recently in the Carbide Archery League. Lynch scored a 291.251 total score. Scratch highs went to C. H. Hileman, Black, with a 234.

Team honors were swept by the Blacks as they registered 446 scratch, and 578.346 handicap . . . placing themselves square on top of the heap of arrow-shooters. League standings follow:

ugue	Standings	H'cap P
20.00		9
		6
		6
		5
		4

Pistoleers Fire

The same trio led in the seventh and eighth firing of scratch scores in the Y-12 Pistol League recently, in different order, however. In the seventh firing G. W. Martin was first with 249.6, T. C. Swindell with 247.5 and H. N. Benninghoff with 247.3.

In the eighth round Benning-hoff led with 251.2, Swindell came second with 247.25 and Martin came in third with 245.3.

In handicap firings in the seventh W. A. Less was first with 288.703; Benninghoff had 288.156 and V. D. Holt scored 286.869. In the eighth round Martin's 292.871 was high, 291.226 scored R. Matheney second and Holt's 287.712 registered third.



"We have the report on your aptitude, ink blot, I.Q., and personality tests. You poor, mixed-up kid."

Winstead-Collins Lead Putt League

Leaders Clobber Second Place Team

The Putt Putt Miniature Golf The Putt Putt Miniature Golf League got in only one match last week . . . as the Winstead-Collins pair defeated the Myers-Boyd team by six strokes . . . a total score of 75 strokes vs 81. Winstead aced number seven . . . Myers took 14 . . and Boyd had a hole-in-one on six.

The Williams Williams and

The Williams - Williams and Stinnett-Roberts match got post-poned due to vacations.

League	standi	ngs fo	llow:
Team			W
Winstead-Co	ollins		8
Myers-Boyd			4
Stinnett-Rol	perts		2
Williams-Wi	illiams		1
	0		

Dick Huber Is Early Tennis League Leader

Dick Huber moved into the cat-bird seat of the Y-12 Tennis League last week. He defeated Bill Harper in three sets, 6-2, 6-1, and 6-1.

Bob Bass took a sweeping victory over Roy Huddleston, winning three, 6-4, 6-3 and 6-3. Ron Williams took two matches from Campbell King 6-3, 6-3 after los-ing the first one 1-6. Bill Harper took two from Roy Huddleston 6-2, 6-2, and lost one 4-6.

Four players are yet unreport-

League standings follow: Campbell King
Ron Williams
W. L. Harper
Roy Huddleston
Ralph Levy
Al Fischer
Mike Laggis
John Pridgeon

GIANT UMBRELLA

More than 18,000,000 employees are protected by group hospital expense insurance issued by life insurance companies in this country. And since this is mostly family-type coverage, an additional 32,000,000 wives and children also come under this mantle of pro-

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Continued From Page 2 the summer "White House" at Hyannis Port but if it isn't avail-

With his family **Dave Sisson** spent a week with his wife's parents in High Point, North Caro-

S. "Shell" Hall heard the W. old bugle call and took off for a couple of weeks with Uncle

Jeri Kobisk and son Robert have just returned from what sounded like a glorious week and a half spent hitting the high spots of Norfolk, Williamsburg, and Washington, D. C. From Washing-ton they flew to Bermuda for five days of tropical sun. For anyone contemplating a trip there, just check with Jeri. She will convince you that this is the place to go . . . Bermuda, that is.

From the Division Office, it's learned that Nancy Polston left Friday for a week's vacation in Daytona Beach, Florida. She will be accompanied by Jane Brown, Mechanical Development, and his appearance July 11 at the Rockwood Hospital we gight no Mechanical Development, and Nancy's sister of South Pitts-

One way to reduce your bills . . . just put them on microfilm.

MAINTENANCE

Process Maintenance has **H. Woodby** and family vacationing in Georgia for three weeks.



Brenda Lee Gladding

No future ball-player here . . . she's a girl! She's little Brenda Lee Gladding, born July 5, at Knoxville Baptist Hospital, to Mr. and Mrs. Fred Gladding. Papa is a professional baseball player, owned by the Detroit Tigers now playing in Syracuse. Mother corporate manager it may be dol-Margie is the daughter of R. V. lars in a bank; to the Soviet farm Clotfelter, Buildings and Grounds minister, the seed grain in a ware-

proud grand-pop.

leave them a legacy.

Some gals don't mind if you love 'em and leave 'em . . . if you

ACCOUNTING AND BUDGET

Property pops up that N. L. Ensor is spending his vacation hiking in the Great Smoky Moun-tain National Park with his son

and a group of Boy Scouts.

Davis . . . all out for his dear old uncle.

A cheery hello is sent to Jo able he will probably stay with Denton, Ken's wife, ill in a Knox-

ville Hospital. Headed for a long weekend with homefolks in West Tennes-see were Athala Markland, Mark and Brenda.

Off to Auburn University for a weekend trip to visit her husband was Ellen Hughes. Her husband is a senior there in Pharmacy

CHEMICAL OPERATIONS

The Chemical Department has H. Bridges Jr., on a trip to Brooklyn, New York to vacation visiting relatives and taking in some ball games.

To speed is human — to get caught, a fine.

ENGINEERING

Rockwood Hospital, weighing eight pounds, 14 ounces.

It's a boy for the Oscar Smiths
. Larry Smith arrived July 10, in the Oak Ridge Hospital, weighing eight pounds, one ounce. Congratulations.

For vacation-time Fran Willie

chose Florida, again!
Leaving, but with no word, were G. C. Bell, S. K. Delcour, and W. L. Horner.

That's about it.

Defining Profit Is No Problem

There are many ways to define profit, some so complex as to be valuable only to professional economists. Here, one of the briefest of classical definitions serve best. Profit is what is left when the costs of some activity are deducted from its revenues.

A simple equation, it is subject to a vast amount of misinterpre-tation. As a sum left over at the end of the calculation, it has required such unfortunate designa-tions as "residual" and "remain-der," words devoid of construcder," words dev

In truth, profit is the margin for growth, and the energizing agent of production. It is the reward to the venturesome, the return for effort expended. To the who is also Brenda Lee's house; to the native islander, the racks of dried fish stored against the future. Whatever its form,

profit is vital to any society.
(Reprinted from POINTS, February, 1963, published by the Ohio Chamber of Commerce.)

NEW PEACH STATE

Georgia had better look to her honors . . . even though she calls herself the Peach State. California leads the nation in the pro-Away for two weeks at Fort duction of peaches for both the Campbell, Kentucky, is **Jimmy** fresh and canned fruit markets.



Three riders wanted from Harriman to North, Central, West or Bear Creek Portal, straight day. R. W. Curtis, plant phone 7-8465, home phone Harriman 882-2949.
Rider wanted or car pool mem-

ber from vicinity of West Mary-ville and Airport to East, North or Central Portal, straight day. C. E. Prather, plant phone 7373, home phone Maryville 983-2486.

Rider or car pool member wanted from Norwood vicinity, Clinton Highway, to East or North Portal, straight day. H. T. Potter, plant phone 7-8524, home phone Knoxville 687-4411.

Ride wanted North . . . one

way. Going to Bethlehem, Pennway. Going to bethleim, Fellisylvania . . . will accept ride within 100 mile radius of Philadelphia. Will share expenses. Ready to leave Friday, p.m. July 26, or August 2. J. L. Reagan, plant phone 7-8244.

Ride wanted from Karns Com-

Ride wanted from Karns Community, Emory Road at Hack-worth Road, to Central Portal, straight day. Call either C. C. Sharp, plant phone 7-8244, or B.

L. Fritts, plant phone 7009.

Ride wanted from Oakwood section, one-half block off North Central, Knoxville, to West Portal, straight day. Nora Hurst, plant phone 7-8923, home phone Knoxville 524-4964.

Ride wanted from vicinity Woodmont Circle, Clinton, to North Portal, K Shift. Glenna Brown, plant phone 7032, home phone Clinton 457-0749.

Ride wanted from Norwood section, Knoxville, to North Portal, K Shift. Christine McEvoy, plant phone 7032, home phone Knoxville 687-3825.

City Of Angels Get AEC Nuclear Assist

The Atomic Energy Commisto the City of Los Angeles toward the design of a large nuclear power plant. The plant would be built in Corral Canyon near Malibu Beach. The cost of the plant, including the AEC design aid, is about \$96,600,000.

In proposing to provide design assistance, the AEC is demon-strating that large, all-nuclear electrical generating facilities can be operated as economic sources of power.



THOMAS D. WATTS, Metallurgical Development, at right, receives a customary \$1 for his patent application award, "Fabrication of Nuclear Reactor Fuel ore." Department head Paul E. Wilkinson, left, makes the presentation. Watts earned the application while at ORNL in collaboration with Joseph P. Hammond.

Tom Watts' ORNL Development **Earns \$1 Patent Application**

Watts, Metallurgical Development. Watts received his award tions can be fabricated to yield for a joint development, with Joseph P. Hammond. Both were at Oak Ridge National Labora- useful in the case where it is de-

A brief description of the development follows:

"FABRICATION OF NUCLEAR REACTOR FUEL CORE"

The invention relates to method of fabricating a composite fuel core for plate type fuel elements by powder metallurgical techniques. Plate type fuel elements are used in many reactors including the Materials Testing Reactor (MTR) and the High Flux Isotope Reactor (HFIR). A composite core comprises two or more discrete regions: 1) a primary core which comprises an alloy containing fuel material which varies in thickness across the width of the element, and 2) a secondary core which comprises a metal or alloy which may conof power.

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distribution and with may contain the plant of a new form the poison or diluent filler material. For any given fuel element shape and size, by utilizing a composite

Y-12's latest recipient of a \$1 core, an infinite number of compatent application is Thomas D. binations of primary and secondary core shapes and compository for the patent application . . . Sirable to distribute a bullion tory for the patent application . . . Watts has since then transferred plate in a concentration gradient plate in a concentration gradient differs from the fuel conwhich differs from the fuel concentration.

Forms Compact Metal

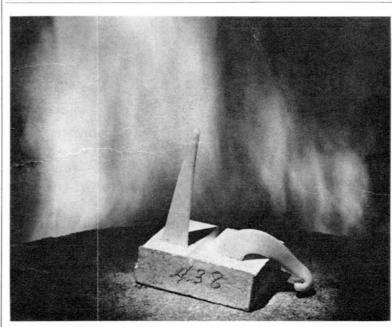
In accordance with the invention, a composite core of nuclear fuel material and a filler material, which may if desired contain a burnable neutron poison, is fabri-cated by charging a die assembly with a first metal powder containing a nuclear fuel, and shaping the upper surface of said first metal powder charge to a desired contour. A second metal powder containing the filler materials is then placed within the die assembly on top of the first metal powder to bring the powder level up to a selected level. The two powders are then lowered into a pressing position in the die and simultaneously pressed to form a composite metal compact. The composite metal core, thus

formed, is ejected from the die, placed in a "picture frame" and "sandwiched" between cover plates. The resulting assembly is reduced in thickness by rolling at elevated temperatures. Relative thickness variations designed into the fuel and burnable poison of the original core are retained throughout the rolling process. The final involute configuration of the plate is achieved by a low pressure marforming technique.
A selected number of the plates
fabricated as described above are
assembled to form the core of the

Watts is a native of Oak Park, Illinois. He was graduated with a BS degree in metallurgy from the University of Wisconsin, and has done graduate work at the University of Tennessee. Married to the former Judith Delforge, the young engineer lives at 117 Tucker Road, Oak Ridge. He began employment here with ORNL in July, 1959, and transferred to Y-12 April 1, 1963.

West Virginia Once Was Named 'Kanawha'

West Virginia, the 35th state, was admitted to the Union during the Civil War. In April, 1862, 41 counties voted to ratify the new constitution. The state was first named "Kanawha," but the name "West Virginia" was adopted upon entry into the Union on June 20, 1863.



IF YOU LIKE GUESSING GAMES, here's three tries on identifying these weirdlooking triangles. Give up? . . . they are pyrometric cones used for telling exactly when a batch of motion picture projector carbons is ready to leave the oven after the baking cycle. They are but one of the quality control techniques used by National Carbon Company, division of Union Carbide Corporation, to produce projector carbons that provide motion picture audiences with today's finest screen light. Two of the heat-sensitive cones are placed in every baking furnace, and when one is leaning and one sagging, as shown, the proper temperature has been reached and the projector carbons are removed for further process-